Anemone-Rosaceae Rust - *Ochropsora ariae*

Although this rust develops on rosaceous hosts including cultivated apples, it does not seem to be damaging to that crop.

Ochropsora ariae Ramsb. 1915

Spermogonia amphigenous (on both leaf surfaces), more or less evenly scattered, subcuticular, conical, 110-140 µ wide × 60-100 µ high.

Aecia hypophyllous or on abaxial leaf surface, aecidioid, surrounded by well-developed peridium, cupulate; peridial cells cubical, outer walls smooth, inner walls verrucose; aeciospores produced in chains, subglobose or broadly ellipsoid, often angular, 14-27 × 13-21 µm, walls thin, hyaline, densely warted.

Uredinia Uredinia hypophyllous or on abaxial leaf surface, minute, round, 0.15-0.25 mm diam; paraphyses incurved variable in size, 29-77 × 8-19 µm wide; urediniospores broadly ellipsoid or obovoid, 21-28 × 17-23 µm, walls 1.5-2 µm thick, hyaline, verrucose to echinulate.

Telia hypophyllous, scattered or irregularly aggregated on yellowish to reddish spots, subepidermal, becoming erumpent; teliospores broadly cyindric, round at apex, 35-65 × 9-18 µm, 4-celled basidia continuously replacing teliospores; basidiospores oboviod to ellipsoid or narrowly ellipsoid, 20-25 × 7-10 µm; probasidia developing under host epidermis, sessile, walls thin and fragile, oblong to cylindrical, variable in size from 27-47 × 9-18 µm.

See Hiratsuka et al.(1992) and Ono (2006) for more detailed descriptions.

Host range: The spermogonia and aecial stages occur on *Anemone* while the uredinial and telial stages develop on various genera of *Rosaceae* including *Amelanchier*, *Aruncus*, *Pyrus*, *Sorbus*, and infrequently on *Malus* and *Prunus*.

Geographic distribution: Widespread in Asia (China, Japan, Nepal, Taiwan, thailand) and Europe (Bulgaria, Denmark, Finland, Germany, Greece, Norway, Poland, Russia, Sweden, Turkey, United Kingdom).

Notes: The telial stage of this rust species occurs on a wide range of rosaceous hosts while the aecial stage develops on *Anemone*. However, few studies have been made to confirm these hosts. Based on artificial inoculation experiments, Ono (2006) confirmed that the spermogonial and aecial host of *Ochropsora ariae* was *Anemone pseudo-altaica* producing the telial stage on *Aruncus dioicus* var. *tenuifolius*.

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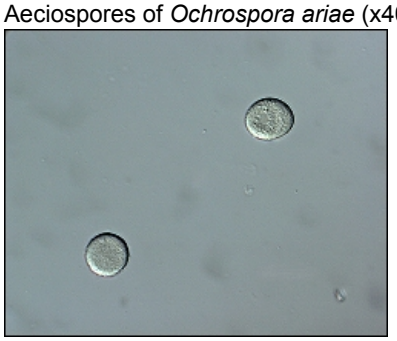
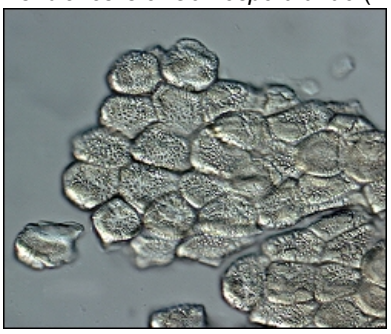
Aecia of *Ochrospora ariae* (x2.5) BPI 190765

Aeciospores of *Ochrospora ariae* (x40) BPI 190765



Peridial cells of *Ochrospora ariae* (x40) BPI 190765



Peridial cells of *Ochrospora ariae* (x40) BPI 190765